

## REMARKS

### *Claim Rejection Under 35 U.S.C. §112*

In the Office Action, the Examiner rejected claims 15 and 21 under 35 U.S.C. §112.

These claims have been amended to overcome this rejection.

### *Claim Rejection Under 35 U.S.C. §103*

Claims 15 and 21 are independent. In the Office Action, the Examiner rejected these claims under 35 U.S.C. §103 citing a combination of Frankowsky (U.S. Patent No. 6,961,880) and Miller (U.S. Patent Publication 2003/0237061).

Claim 15 has been amended (claim 21 has been similarly amended) such that it now specifically claims:

testing functional memory;

repairing the functional memory by adding access to redundant elements;

re-testing the functional memory which has been repaired;

after repairing the functional memory by adding access to redundant elements and after re-testing the functional memory which has been repaired, adding access to additional redundant memory without using the additional redundant memory to replace functional memory wherein the additional redundant memory is not required for the repair; and

after repairing and re-testing the functional memory and adding access to the additional redundant memory which has been added which was not required for the repair, testing the additional redundant memory which has been added which was not required for the repair.

In other words, the functional memory is tested and then repaired by adding access to redundant elements. Then, the repaired functional memory is tested again. After that, access to additional redundant memory is added, without using the additional redundant memory to replace functional memory, wherein the additional redundant memory is not required for the repair.

Even if Frankowsky can be said to disclose testing the functional memory (block 22 in Fig. 2), repairing the memory (block 24 in Fig. 2), and then testing the repaired memory (block 28 in Fig. 2), the subsequent step of repairing (block 30 in Fig. 2) does not consist of adding access to additional redundant memory without using the additional redundant memory to replace functional memory, wherein the additional redundant memory is not required for the repair. Instead, this repairing step (block 30 in Fig. 2) provides that access is added to additional redundant memory to replace functional memory and effect a repair. Nowhere is it disclosed or suggested in either Frankowsky or Miller to, after repairing the functional memory by adding access to redundant elements and after re-testing the functional memory which has been repaired, add access to additional redundant memory without using the additional redundant memory to replace functional memory wherein the additional redundant memory is not required for the repair. As such, Applicant respectfully submits that the independent claims, and those claims which depend therefrom, are allowable over Frankowsky and Miller.

Applicant respectfully submits that at least some of the dependent claims are further allowable over the cited references. For example, claim 17 specifically claims (claim 23 is similar) the step of adding access to additional redundant memory which is not required for the repair comprises forcing usage of redundant elements which are not needed to be used for

repairing the memory. While the Examiner asserted in the Office Action that Tanishima (U.S. Patent No. 6,999,357) discloses this, Applicant respectfully traverses. To the extent that Tanishima teaches adding access to redundant memory, the redundant memory is required for a repair, and there is no forced usage of redundant elements where the redundant elements are not needed to be used for repairing the memory. Like Frankowsky and Miller, Tanishima does not disclose adding access to additional redundant memory cell arrays after the functional memory is already tested, repaired and re-tested, where the redundant memory cells which are added are not required for a repair of the functional memory.

In view of the above amendments and remarks, Applicant respectfully requests that the present application be passed to issuance.

Should the present claims not be deemed adequate to effectively define the patentable subject matter, the Examiner is respectfully urged to call the undersigned attorney of record to discuss the claims in an effort to reach an agreement toward allowance of the present application.

Respectfully submitted,

Dated: October 17, 2008

By: 

James R. Foley, Reg. No. 39,979  
TREXLER, BUSHNELL, GIANGIORGI,  
BLACKSTONE & MARR, LTD.  
105 W. Adams Street, 36th Floor  
Chicago, Illinois 60603  
(312) 704-1890